

HOW TO... Make the most of your USB flash drives

Microsoft's Flash Drive Manager can help you get more out of your portable storage devices. Simon Williams shows you how to use this useful free utility

USB drives, also known as flash drives and thumb drives, are now as ubiquitous as floppy disks once were. Storing hundreds of times as much data as the old 3½-inch floppy disks, they're even easier to use. Plug a flash drive into any USB port on your PC and Windows recognises it as a drive, in much the same way as it sees a hard disk or a DVD. You can copy files to and from it by opening the source and destination folders and dragging files from one to the other.

Microsoft's Flash Drive Manager is a simple program that makes working with flash drives easier. With the cost of drives falling all the time, many people have several of them, so some way of maintaining them and backing them up for security is very useful. The ability to use a flash drive to set up a wireless network quickly and easily is also extremely handy.

Microsoft's Flash Drive Manager is not supplied with Windows, but it can be downloaded free from the Microsoft website (<http://tinyurl.com/3r44p>). After installation, plug a flash drive into any available USB port before starting the walkthrough.

1 Flash Drive Manager is designed to handle all the kinds of jobs for which you're likely to want to use your flash drive, including copying files, backing up and restoring their contents,

making a flash drive auto-run when plugged in and copying all the necessary files for setting up a wireless network.

The main Flash Drive Manager screen shows six tabs running across the top. These cover the main tasks the software can perform. If you're not sure which of these tabs you'll need, the links on the Overview tab might be helpful. These take you to the same tabs, but allow you to choose the most appropriate one based on the task you want to do.

A third way of getting at the different tasks is to use the View menu at the top of the Manager display, which offers the same six options as the tabs. You can use whichever access method you prefer. Click the Copy Files tab for now.

2 On the Copy Files tab, any flash drives you have plugged in are shown on the left-hand side so you can select the drive you want to use to run a task. Click on a drive name to select it and a list of folders and files will appear in a selector in the right-hand column.

The file and folder list is live, so you can drag files from other folders to the Flash Drive Manager pane and drag files from it to copy them to other drives. You can't copy files directly from one memory drive to another within the manager. However, you can open Windows Explorer browsers on each drive by selecting

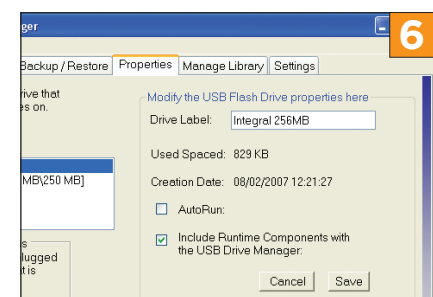
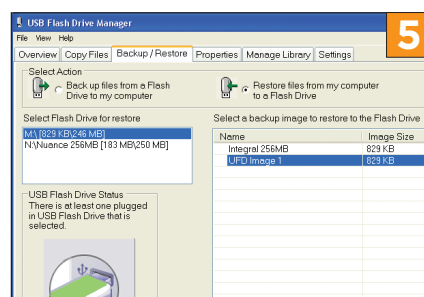
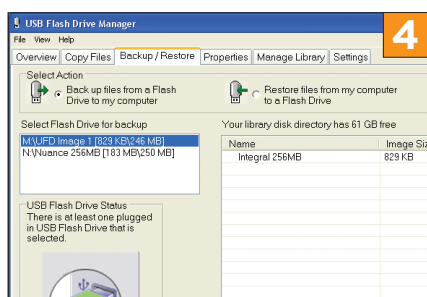
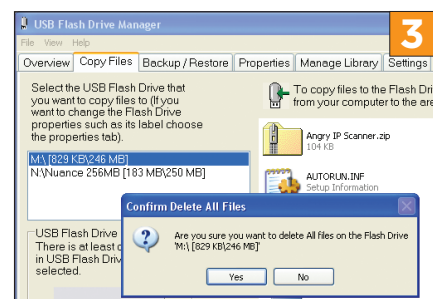
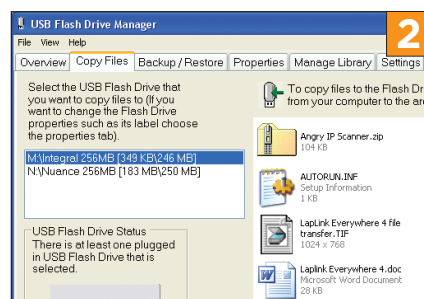
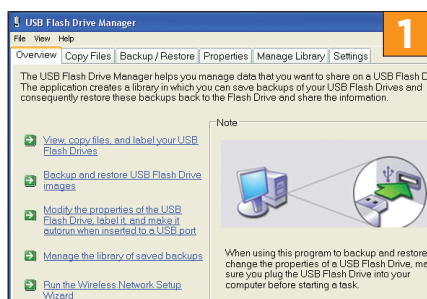
them in turn and clicking the Explore button below the file selector.

3 There are two other links on the Copy Files tab: a hyperlink marked Properties and a Delete All Files button. We'll cover Properties later in Step 6, but you should be cautious with the Delete All Files button, as a flash drive can be inadvertently wiped by pressing it. There is a confirmation dialog to help prevent this, though.

It's best to use the backup function, provided from the Backup/Restore tab, to make a copy of the contents of your flash drive before deleting all files. Click Backup/Restore or select 'Backup and restore USB/Drive images' from the Overview tab.

4 The Backup/Restore tab requires just three clicks to create a complete backup of a selected memory drive. First, select the action 'Back up my drives from a Flash Drive to my computer'. Then select the flash drive you want to back up from the left-hand list, and finally click the Backup button. If you want to overwrite an existing backup image, select its name from the right-hand list.

By default, backup images are saved in the My Documents\Microsoft USB Flash Drive Backup folder. This can be changed from the Settings tab, which we'll look at below.



5 Restoring an image to a flash drive is just as simple as backing up. Select the action 'Restore files from my computer to a Flash Drive', then choose the flash drive to which you want to restore the image from the left-hand list. Select a backup image name from the list on the right-hand side of the dialog box. The image will then be copied across. If you tick the box next to 'Clear Flash Drive before restoring' at the bottom of the backup image list, the flash drive will be wiped before the image is copied across.

There's a snag with restoring flash drive images. The program restores everything to your flash drive inside a single folder with the name of the backup image, rather than to separate folders as there were originally on the drive. This may be what you want, but if not, you must open Windows Explorer, go to the restored folder and copy the files to the drive itself, then delete the restored folder. This is messy, and hopefully the next version of Flash Drive Manager will have a more elegant way of restoring files and folders.

6 Just as with a normal hard disk, you can add a label to a flash drive to identify it within Windows. The Properties tab enables you to do this, as well as a couple of other things.

Click on the Edit button and you can type a label into the Drive Label field to give your flash drive a name. Ticking the 'AutoRun' box will make the flash drive run automatically when plugged into a USB port. Ticking the option to 'Include Runtime Components with the USB Drive Manager' adds 22MB of code, but enables the drive to autorun on Windows computers that don't otherwise have the necessary components to do that.

7 The Properties tab and the Manage Library tab have quite a bit in common. The Properties tab operates on a flash drive plugged into one of the USB ports on a PC, while the Manage Library tab works with the drive backup images that have been saved on a hard disk. Again, labels can be added to them and they can be set to autorun and to include the runtime components needed to help them autorun on some Windows XP PCs.

There are two buttons at the bottom of the window: to delete the selected backup image and to open an Explorer window on it. Each image is actually a folder on the hard disk, containing the files from the drive in uncompressed form and any autorun details needed to run the drive image once it has been restored to a drive.

8 The final tab in the Flash Drive Manager has its window divided into two parts. At the bottom are three different settings. The first of these is to include the runtime components needed to make a flash drive autorun and is linked with the equivalent options on the Properties and Manage Library tabs. This is the default setting.

The second option enables you to enter a minimum amount of free disk space on your hard disk, so that a backup from a flash drive doesn't fill it. Finally, you can enter a path to a folder where you want Flash Drive Manager to store flash drive images. Click on the Browse button to navigate to your desired folder and then on the Save button to save any setting changes you make.

9 The remaining button on the Settings screen is labelled Start Wizard. This starts the Wireless Network Setup wizard. The first page of this wizard is just an introduction, but the second enables you to enter a Service Set Identifier (SSID) name for your wireless network. This will normally be the name assigned by your wireless access point or router and is shown in its user guide.

The two radio buttons below this enable the network to be set up with automatically assigned network keys, which is the easiest option, or to enter a network key manually, if you need to use older devices with pre-assigned keys. Finally, at the bottom of the dialog is a tickbox where you can opt for stronger WPA encryption rather than the default WEP. Most modern devices support WPA, but if you're uncertain, choose WEP, which is more widely supported.

EXPERT TIP

Right-click on the Microsoft USB Flash Drive Manager icon to pin the applet to the Start menu, so it's much quicker to get at when you insert a flash drive.

10 The next screen in the wizard enables you to select either a flash drive or set up a network manually. We're discussing the use of the USB Flash Drive Manager here, so you should accept the default setting, which is 'Use a USB Flash Drive (recommended)'. Click Next.

11 The idea of using a flash drive to set up a wireless network is that, without one, each computer you want to connect wirelessly has to be configured manually with the necessary wireless parameters. It can then start communicating with other wireless devices. Using a flash drive to copy these parameters from one computer to another is a lot more convenient. However, to use a flash drive you need a router compatible with Windows Connect Now. These routers have a USB port they use for configuration.

The next screen in the wizard is used to select which flash drive to save the wireless network settings to. Unfortunately, you're back to using drive letters, as the wizard doesn't pick up the drive label you've assigned in the Flash Drive Manager. Select the flash drive letter and click Next to copy the information across to your flash drive.

12 To finish setting up your wireless network, follow the three steps in the wizard. Unplug your flash drive from the PC that you are running the wizard on and plug it into your Windows Connect Now router. The flash drive will pick up the necessary information from your router and supply details of your PC.

Now plug it in turn into each of the computers you want to add to the wireless network and it will exchange information with each, in the same way. Finally, plug it back into the computer you've been working on and the details of all the PCs connected to the same wireless network will appear on a final screen in the wizard, confirming that you have established your network. Click the Finish button to complete the wizard and return to Flash Drive Manager. 

